

STAFF REPORT

on

# **Triennial Review of the Water Quality Control Plan for the Lahontan Region**

California Regional Water Quality Control Board  
Lahontan Region  
2501 Lake Tahoe Boulevard  
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## **Introduction**

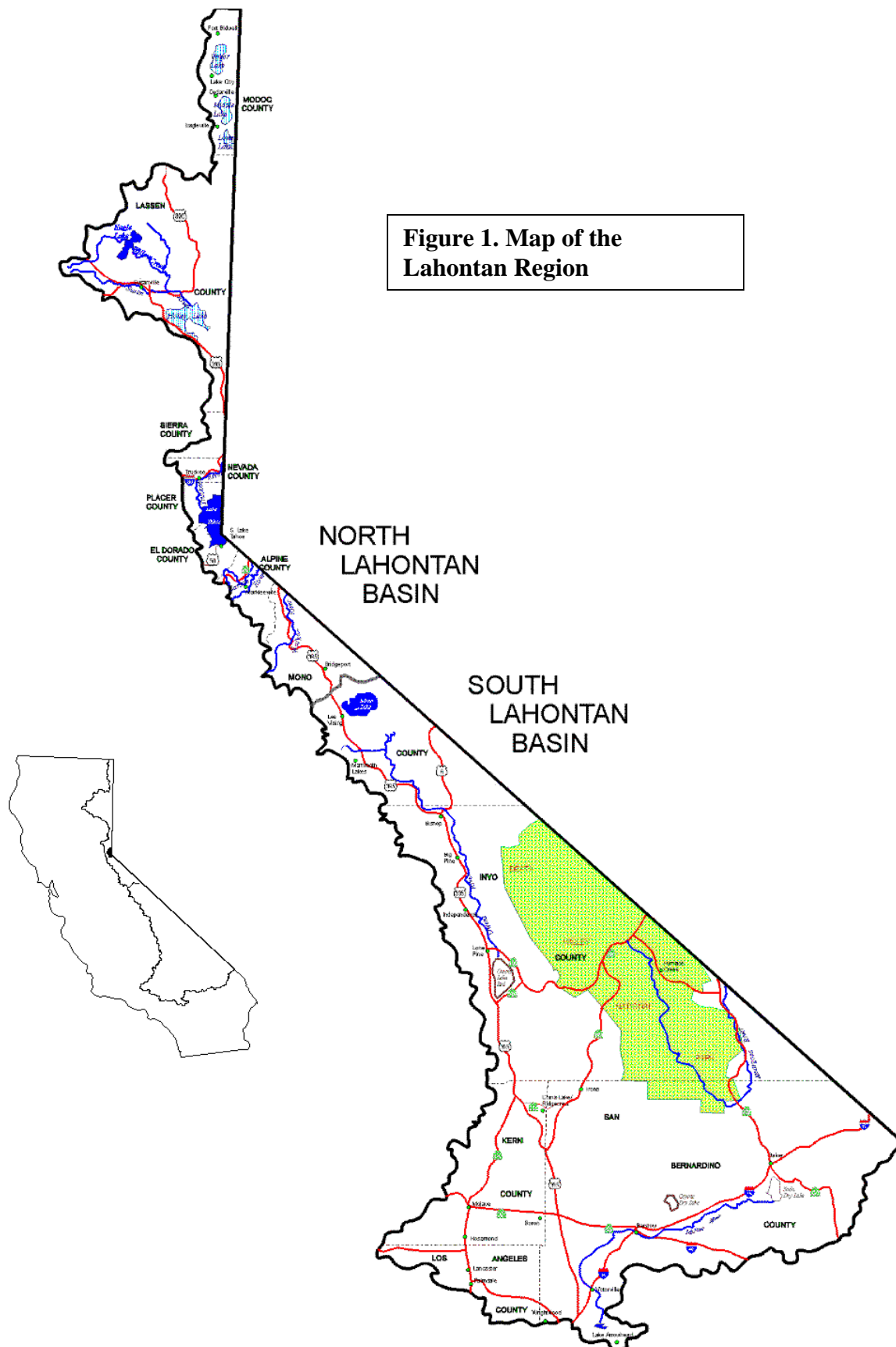
The California Regional Water Quality Control Board, Lahontan Region (Water Board) is the state agency responsible for setting and implementing water quality standards in about 20 % of California east of the Sierra Nevada crest and in the Northern Mojave Desert (Figure 1). Water quality standards and control measures are contained in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). The current Basin Plan took effect in 1995, replacing three earlier plans. As of July 2006, seven sets of amendments to the 1995 plan have received all necessary approvals. The Basin Plan is available on the Water Board's Internet web page at: <http://www.waterboards.ca.gov/lahontan>.

State and federal laws require periodic review and revision of Basin Plans; the federal process is called "Triennial Review." Some states revise water quality standards as part of the Triennial Review process. Due to resource limitations and the complexity of California's plan amendment process, Triennial Review in California is generally limited to identification of high priority planning issues to be addressed over the three years between one Triennial Review cycle and the next. Unless it actually involves adoption of plan amendments, Triennial Review is not a regulatory action and does not require environmental analysis under the California Environmental Quality Act. The Water Board's current Triennial Review priorities were adopted in October 2003.

A public hearing for Triennial Review is scheduled for the Water Board's October 11 and 12, 2006 regular meeting in Kings Beach, California. This staff report provides information on the Triennial Review process and on planning issues identified by Water Board staff. Additional issues may be identified in written public comments or testimony at the hearing. Water Board staff will make final recommendations regarding priority planning issues following the public hearing. The Board will be asked to approve a "short list" of issues to be addressed over the following three fiscal years, and to identify the remaining issues as issues requiring additional funding. The review process does not necessarily mean that specific revisions will be made to the Basin Plan, but after investigation by Water Board staff, the identified issues may result in plan amendments.

## **Water Quality Standards**

In California, water quality standards include designated beneficial uses of water, narrative and numerical water quality objectives, and a nondegradation policy. Water quality objectives are equivalent to federal "water quality criteria." Water quality standards in the Lahontan Basin plan are set forth in Basin Plan Chapters 2, 3, and 5. The plan's beneficial use tables (Tables 2-1 and 2-2) do not distinguish between existing and potential beneficial uses. Most of the numerical objectives are based on historical water quality data collected before adoption of



**Figure 1. Map of the Lahontan Region**

the 1975 North and South Lahontan Basin Plans, and reflect antidegradation considerations rather than numeric criteria for the protection of specific beneficial uses. Unless criteria for variances to objectives are specifically included in the Basin Plan, variances or exceptions cannot be granted without Basin Plan amendments to revise the objectives.

Applicable water quality standards also include numerical limits for toxic “priority pollutants” promulgated as surface water standards by the U.S. Environmental Protection Agency (USEPA) under the National Toxics Rule and California Toxics Rule. These standards have not yet been physically incorporated into the Basin Plan.

All of the waters of the Lahontan Region are internally drained, and many of them are isolated. The U.S. Army Corps of Engineers has determined that some waters within the Lahontan Region are not “waters of the United States” under the federal Clean Water Act. State standards still apply to any “waters of the State” that are determined not to be waters of the United States.

### **Triennial Review Process and Public Participation**

The Water Board’s 2006 Triennial Review Process will involve:

- Noticing the public hearing in newspapers throughout the Lahontan Region.
- Sending staff’s draft issues list and the hearing notice to the Water Board’s Basin Plan mailing list containing over 400 addresses.
- Making copies of the hearing notice, issues list, and this staff report available on the Water Board’s webpage.
- Providing a 45-day public review period for the issues list and the opportunity to submit written comments.
- Preparing written responses to written public comments. All comments and responses will be provided to Water Board members before the hearing.
- Testimony at the public hearing.
- Water Board adoption of a resolution identifying priority planning issues to be addressed by staff and issues requiring additional funding, and affirming the adequacy of the remainder of the plan.
- Completion and submission of the administrative record of the Triennial Review process to the State Water Resources Control Board (State Water

Board). The State Water Board will make the approved Triennial Review, including the resolution and priority list, available to the U.S. Environmental Protection Agency (USEPA).

## **Basin Plan Amendment Process**

The Basin Plan amendment process is summarized in Table 1, adapted from the State Water Board's planning guidance. As the table indicates, the process is lengthy and complex. (The table does not include the revisions that may need to be made in preliminary drafts in response to comments by internal reviewers, and in response to scientific peer review.) Chronologically, the process can require six months to more than a year between the end of the "research" period in Step A. and Water Board action, and nine months or more can be required after Water Board action for the amendments to receive all needed approvals. "Research" for Basin Plan amendments can include scientific literature review and/or water quality monitoring or special studies. Scientific peer review is required for amendments involving scientific judgment, and the reviewer's comments may result in significant changes to preliminary draft amendments before they are released for public review. Following Water Board adoption, amendments must be approved by the State Water Board, the California Office of Administrative Law (OAL), and (in some cases) the USEPA. To facilitate the OAL review process, a detailed administrative record must be prepared and indexed; records for complex amendments can be several thousand pages long.

## **Planning Considerations**

**Budget.** The Water Board's planning resources are extremely limited. The current baseline funding is about 2.1 personnel years (PY) per year, including overhead costs as well as technical staff time. Some Basin Plan amendments may also require contracted studies for data collection (e.g., special monitoring studies to facilitate update of water quality objectives) or predictive modeling. In addition to the time allocated for specific plan amendment issues, some Water Board staff time should be reserved for ongoing "miscellaneous" plan-related activities as needed.

**Issues needing additional funding.** The State Water Board's guidance for the Triennial Review process asks Regional Water Boards to identify planning issues that would require additional funding to address. The Lahontan Water Board will be asked to choose a small subset of the planning issues identified by staff and the public for emphasis over the next three years; ideally the total estimated cost of the selected issues should not exceed the resources expected to be available within that time. All of the remaining issues will be identified as issues requiring additional funding in order to be addressed during the next three years.

**Table 1 Summary of Basin Plan Amendment Process**

WHO...	DOES WHAT?
<b>REGIONAL OR STATE WATER BOARD</b>	<p>A. IDENTIFY THE NEED for a Plan amendment based on the triennial review, public concerns, new or revised laws, regulations or policies, etc. Undertake work to develop solutions - research, field work (e.g. collect chemical, physical, and/or biological monitoring data; data analysis), etc.</p> <p>B. PLAN the Administrative Record for the amendment.</p> <p>C. PREPARE NECESSARY DOCUMENTS  <b>STAFF REPORT</b> on the proposed amendment; reasonable alternatives, mitigation, economic considerations, and anti-degradation as required <ul style="list-style-type: none"> <li>• If addressing beneficial uses</li> <li>• If addressing water quality objectives</li> <li>• If addressing an implementation plan</li> </ul> <b>THE CEQA CHECKLIST</b>  <b>DRAFT AMENDMENT</b>  <b>DRAFT RESOLUTION</b></p> <p>D. EXTERNAL SCIENTIFIC PEER REVIEW</p> <p>E. PUBLISH A HEARING NOTICE / NOTICE OF FILING at least 45 days prior to the hearing</p> <p>F. RESPOND to comments – revising the draft amendment and staff report as necessary</p> <p>G. ADOPTION HEARING</p> <p>H. REGIONAL WATER BOARD TRANSMIT 2 copies of the complete administrative record to the State Water Board; and PARTICIPATE in State Water Board Workshop and Board Meeting</p>
<b>STATE WATER BOARD</b>	<p>I. APPROVE AMENDMENT at a public meeting (or return it to the Regional Water Board for further consideration)</p> <p>J. TRANSMIT approved amendment to OAL for review and approval of the regulatory provisions</p> <p>K. TRANSMIT the OAL approved amendment to USEPA, if needed, for review and approval of surface waters standards and their implementing provisions</p>
<b>REGIONAL WATER BOARD</b>	<p>L. (1) FILE CEQA NOTICE OF DECISION with the Secretary of Resources after final approval by OAL or USEPA. (2) Either pay Department of Fish and Game filing fee or submit Certificate of Fee Exemption.</p> <p>M. PRINT and DISTRIBUTE Amendment</p>

**Total Maximum Daily Loads (TMDLs).** The federal Clean Water Act requires states to identify water bodies that are not meeting standards due to pollutants (the “Section 303(d) list”), and to prepare strategies called TMDLs to ensure attainment of standards. In California, TMDLs and TMDL implementation programs are generally (but not always) adopted as Basin Plan amendments. TMDLs currently have the highest priority of all State and Regional Board programs statewide. Priorities and schedules for TMDL development are determined through the Section 303(d) list update process and through the Regional Board’s annual TMDL program workplans. Section 303(d) listing does not necessarily mean that TMDLs (and/or Basin Plan amendments) will be developed for all listed waters; the impairment issues may be addressed in other ways.

Work on Basin Plan amendments to incorporate TMDLs will be supported with state and/or federal TMDL program funds, not basin planning funds. Information on in-progress TMDLs is available on the Regional Board’s Internet webpage at: [http://www.waterboards.ca.gov/lahtontan/TMDL/TMDL\\_Index.htm](http://www.waterboards.ca.gov/lahtontan/TMDL/TMDL_Index.htm). Public comments may be submitted on TMDL issues as part of the Triennial Review process. Responses to these comments will be prepared, and they will be included in the administrative record. However, the Water Board’s action will focus on priorities for use of baseline funds for planning topics other than TMDL development.

## **2006 Triennial Review Planning Issues**

Table 2 summarizes potential priority issues for the 2006 Triennial Review. (These issues were identified by staff and have not yet been discussed by the Water Board.) The issues are numbered for reference, but numbers are not meant to imply recommended priorities within high, medium, and low priority categories. This table was sent to the Water Board’s Basin Plan mailing list, together with the public hearing notice, for a 45-day review period.

The issues list does not include the Basin Planning topics being worked upon during State Fiscal Year 06-07 (July 1, 2006 through June 30, 2007). Work on the Triennial Review priorities adopted in 2006 will be done during Fiscal Years 07-08, 08-09, and 09-10.

After reviewing written comments on the issues below, and on any new issues identified by the public, Water Board staff will prepare revised recommendations for inclusion in the Board’s agenda packet. The final staff recommendations will include estimates of staff resources and chronological time required for each topic.



TABLE 2 - DRAFT 2006 TRIENNIAL REVIEW PRIORITIES

Issue No.	Topic	Description	Priority Category
1	Revise waste discharge prohibition affecting piers in Lake Tahoe <b>(2003 Triennial Review Priority)</b>	Revision of the Basin Plan's provisions affecting the Lake Tahoe shorezone (including a prohibition against waste discharges from new pier construction in fish spawning habitat) to increase compatibility with the Tahoe Regional Planning Agency's (TRPA's) shorezone ordinance. Public draft Basin Plan amendments will be completed and circulated after TRPA takes final action on pending revisions to its shorezone ordinance.	High
2	Clarify Basin Plan language related to natural sources of pollutants and "controllable factors" <b>(2003 Triennial Review Priority as part of a comprehensive Basin Plan update.)</b>	The Lahontan Region includes many water bodies such as geothermal springs and inland saline lakes where natural geological processes have resulted in levels of certain constituents that exceed drinking water quality or California Toxics Rule standards. These constituents include Total Dissolved Solids (salinity), arsenic, and radioactive elements. Naturally poor quality has become an issue in relation to Clean Water Act Section 303(d) listing, effluent limitations in permits for geothermal discharges, and other Water Board activities. Water quality objectives may also be violated due to other factors that cannot be controlled through the Water Board's authority, including floods, droughts, and hydromodification (e.g., impoundments and the quality of water imported from other regions). The proposed amendments would strengthen and clarify existing language in the Basin plan that interprets compliance with water quality objectives in relation to "controllable factors."	High
3	Revise exemption criteria for waste discharge prohibitions affecting 100- year floodplains in the Truckee River and Little Truckee River watersheds.	Section 4.1 of the Basin Plan prohibits discharges or threatened discharges of waste within 100-year floodplains in the Truckee River and Little Truckee River watersheds, and allows exemptions for certain types of projects that benefit the public. Exemptions and exemption criteria could be considered for additional categories, including stream crossings for timber harvest operations, and flood plain disturbance for private projects in exchange for offsite restoration.	High

Issue No.	Topic	Description	Priority Category
4	Update water quality objective for turbidity applicable to surface waters of the Truckee River and Little Truckee River watersheds	The existing turbidity objective for surface waters of the Truckee River watershed is expressed as a mean of monthly means (MOMM, a long-term rolling average). It was based on limited monitoring data collected in the 1960s and 1970s that may not reflect the full range of seasonal and annual variation. In developing a revised objective or objectives, Water Board staff will review all available monitoring data and current scientific literature on turbidity in relation to protection of beneficial uses. The proposed new objective(s) will be expressed as annual or other short-term means rather than as MOMMs.	Medium
5	Mixing Zones	As defined in the State Water Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California, 2005" (SIP) a mixing zone is "a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body." This policy allows Regional Water Boards to approve mixing zones in permits for discharges of certain toxic pollutants. However, the Lahontan Basin Plan does not currently include authority for the Water Board to grant mixing zones for other constituents. The proposed amendments would add policy language including general authority to grant mixing zones and specific conditions under which they may be granted.	Medium
6	Editorial update of entire plan ( <b>2003 Triennial Review Priority</b> )	The Basin Plan would be updated to reflect laws, regulations and policies adopted or revised by the State Water and Regional Water Boards and other agencies since the plan took effect in 1995. Examples include the California Toxics Rule, the current statewide nonpoint source management plan and implementing policy, and recent legislation regarding enforcement and waivers of waste discharge requirements. Minor editorial changes would also be made, including corrections of typographical errors.	Medium

<b>Issue No.</b>	<b>Topic</b>	<b>Description</b>	<b>Priority Category</b>
7	Revised water quality objectives for Mojave River	Current numeric water quality objectives for the Mojave River date from the 1970s and 1980s. The Victor Valley Wastewater Reclamation Authority (VWVRA) has proposed that site-specific objectives (SSOs) be developed for the segment of the river downstream from its discharge. VWVRA plans to conduct monitoring to provide data for use in development of SSOs. The amendments could revise objectives for Total Dissolved Solids, chloride, nitrate, and other constituents. Board staff could also consider updating objectives for other segments of the Mojave River and its tributaries. The data needed to develop SSOs may not be available until after the next (2009) Triennial Review.	Medium
8	Modify the Lahontan Basin Plan waste discharge prohibitions to include provisions for protection of additional prime groundwater recharge areas of the arid basins.	Existing prohibitions affecting groundwater include region-wide prohibitions against discharges of waste that cause violation of water quality objectives or further degradation of already degraded waters, and watershed-specific prohibitions against discharges from onsite wastewater disposal systems (septic systems). Additional studies could be needed to identify the boundaries of aquifers to be protected under this topic.	Medium
9	Develop specific water quality objectives for all major closed basin groundwaters within the Lahontan Region.	Basin Plan Table 2-2 designates beneficial uses for 345 separate ground water basins. Chapter 3 includes narrative water quality objectives that apply to all ground water basins. State drinking water standards (Maximum Contaminant Levels) now apply to all ground waters designated for the Municipal and Domestic Supply (MUN) beneficial use under existing water quality objectives for "Chemical Constituents" and Radioactivity. Since almost all groundwaters are designated for the MUN use, SSOs less stringent than state MCLs could probably not be justified. Water quality data are scarce for many basins, and this project could require significant time and resources for additional monitoring. If this topic is adopted as a 2006 Triennial Review priority, work between 2007 and 2010 should be focused on only one or a few groundwater basins.	Low

Issue No.	Topic	Description	Priority Category
10	Work with the Nevada Division of Environmental Protection (NDEP) and the TRPA toward increased consistency of standards for shared waters <b>(2003 Triennial Review Priority)</b>	As part of the Lake Tahoe Total Maximum Daily Load (TMDL) development program, Water Board staff has held periodic discussions of standards consistency with other agencies. Discussions of standards for the Lake Tahoe Basin are expected to continue under the TMDL program, and a specific set-aside of Basin Planning funds for the process is not recommended as a high 2006 Triennial Review priority.	Low
11	Narrative objectives for biocriteria <b>(2003 Triennial Review Priority)</b>	In order to protect the biological integrity of the nation's waters, the USEPA strongly encourages states to adopt water quality standards based on "biocriteria." Biocriteria may be narrative or numeric. Numeric biocriteria often use Indices of Biotic Integrity (IBIs) to provide a numeric ranking system for aquatic community health. Narrative biocriteria are statements that may include any or all of the following: a goal statement that the biological integrity of waters shall be preserved, protected and restored; a definition of biological integrity, and direction on determining compliance. In 2003, Water Board staff proposed development and adoption of narrative biocriteria as Basin Plan amendments, to provide direction for consideration of biological integrity in the Board's regulatory program, and a sound basis for use of IBIs prior to the formal adoption of numeric biocriteria. Since 2003, staff members of all Regional Water Boards have begun discussing the potential for development and adoption of statewide narrative biocriteria by the State Water Board. In the Lahontan Region, University of California studies to develop IBIs for streams in the eastern Sierra Nevada are now nearing completion. The results of these studies will be presented to the Board at a future meeting. Because of other pressing priorities, Lahontan Water Board staff now believe that integration of IBIs into the Water Board's regulatory programs should be addressed through policy direction from the Board to staff rather than through Basin Plan amendments.	Low

Issue No.	Topic	Description	Priority Category
12	Revise Wildlife Habitat beneficial use and/or develop site-specific objectives for Searles Lake (San Bernardino County) <i>(2003 Triennial Review Priority)</i>	The brine mining operation at Searles Lake creates waste brine ponds on the dry lake bed. Migratory birds are attracted to these ponds, and bird kills due to high salinity have occurred. The high salinity is from natural sources. The Basin Plan amendments proposed in Item 2 above may address this issue without the need for a specific amendment.	Low
13	Outstanding National Resource Water and/or BIOL use designation for Surprise Canyon creek, Panamint Valley watershed.	Wilderness Society requested designation to protect creek from further OHV damage.	Low

## **Staff Recommendations**

After reviewing written public comments, staff will prepare final recommendations as part of the Water Board's agenda packet for the public hearing. Staff will request the Board to choose a subset of issues from Table 2 and from any new issues identified in public comments, and to direct staff to investigate these issues over the next three years and develop draft Basin Plan amendments as appropriate. Staff's initial recommendations for the "short list" of issues are those items listed as high priority and Item Nos. 4, 5, 6 and 7 under medium priority in Table 2.

Schedules for completion of public draft amendments and Board action on specific issues will depend upon the complexity of the selected issues. Some of the issues may be worked upon between Fiscal Years 07-08 and 09-10, with Board action on plan amendments after 2010. If important new issues arise before the next Triennial Review, planning priorities may be changed by the Water Board or the Executive Officer. Issues not selected for emphasis in the next three fiscal years will be identified as issues requiring additional funding. Staff will reconsider these issues during the next Triennial Review process and may recommend them as priorities at that time.